

East Retford  
Rural District Council

---

ANNUAL REPORT

for the year 1920

BY

Hanway R. Beale, M.D.Lond., D.P.H.,  
M.R.C.S., L.R.C.P.,

MEDICAL OFFICER OF HEALTH

---

RETFORD :  
PRINTED BY WINTER & SON, 24, GROVE STREET  
1921.

1921.

Total Population (estimate for year)	14,536
Total Population (at Census, 1911)	14,776
Birth Rate        ...        ...        ...        ...	22·15
Death Rate        ...        ...        ...        ...	13·14
Infantile Rate    ...        ...        ...        ...	80·2
Area of District in acres    ...        ...	92,740
Assessable value        ...        ...        ...	£110,372
Rate of 1d. yields        ...        ...        ...	£460

---

---

Number of Parishes in District	...        48
--------------------------------	---------------

Chairman of Sanitary Committee—

T. W. Cartwright, Esq.

Vice-Chairman of Sanitary Committee—

T. L. Hollely, Esq.

Medical Officer of Health—

Hanway R. Beale, Esq., M.D., D.P.H.

Surveyor and Inspector of Nuisances—

John Turrill.

## TO THE RURAL DISTRICT COUNCIL OF EAST RETFORD.

---

GENTLEMEN,

I have the honour to present to you my 16th Annual Report as your Medical Officer.

**Population.**—The year to which this Report relates is the 9th after the census, and the difficulties of estimating the population and consequently the birth- and death-rates, which always become greater as the time since the last census increases, are enhanced by the disturbances of the past six years. The war called away many of the young of both sexes and there was afterwards a migration of many young people to the towns, and in addition to the war, we have had a devastating pandemic.

The Registrar General estimates the population as 14536, that is a decrease of 26 compared with last year's figure for finding the birth-rate, but an increase of 557 over that estimated for calculating the death-rate. This year only one estimate of population is given. The population found at the last census in 1911 was 14776.

**Births.**—The total number of births registered during the year was 322, of which 162 were boys and 160 girls. There were 24 illegitimate births included in this total. This gives a birth-rate of 22·15 per thousand. Compared with last year, this is an increase of 6·5 per thousand, but it falls far below the average rate for the whole of the country, which is 25·4 per thousand.

**Deaths.**—The total number of deaths occurring in the District was 191, giving a death-rate of 13·14 per thousand. This is a higher figure than the 12·4 per thousand, the death-rate for England and Wales. The infantile deaths numbered 21, the death-rate for infants under one year of age being therefore 80·2 per thousand births. This is practically the same as for the country as a whole.

The lower birth-rate and higher death-rate of the District as compared with those for the whole country do not suggest that the District is less healthy, but that there is a greater proportion of older persons and young children, the young adults having migrated into the towns. This is a condition commonly found in rural districts.

In physical features, the District is undulating ; there is a line of hills running from north to south in the eastern portion dividing the watersheds of the Trent and Idle, but these at their greatest height do not exceed 292 feet above sea level.

The District is purely rural in nature, and the population is dependent almost entirely upon agriculture and occupations ancillary thereto. The Municipal Borough of East Retford is situated in the centre. A colliery has been sunk at Harworth which is just outside the District, and it will probably have the effect of increasing the population of the villages of Ranskill, Torworth and Scrooby. Borings for coal are being made in different parts of the District, and coal is found in varying amounts, so that it is likely that in the near future the character of the District will change and the population considerably increase. This will have a very considerable bearing upon water supplies and give force to my remarks under that heading.

Occupation is good, and except for the aged, there is very little occasion for poor law relief.



There is no Hospital in the District, but use is made of the Hospital in the Borough of East Retford. There is no great demand made on the beds of the Poor Law Institution or of the voluntarily supported Hospital, as the health of the inhabitants generally is good.

**Water Supplies.**—The eastern portion of the District is upon clay soil, in which there are veins of gypsum. The wells are nearly all shallow and liable to pollution, and the water obtained from them is very hard and almost useless for washing purposes. Rain water is relied on in many parts for these purposes, and the well water used only when necessary and for swilling. There are a few deep wells giving a better quality of water, in the hands of private owners. Water is supplied from these to the neighbours and tenants. There are also some springs from surface waters, but these are hard, although most of them give a pure water.

In some cases water from the Chesterfield canal is used for all purposes, including drinking.

In previous reports I have given the result of my investigations of the water supply of several portions of the District. During the year an inquiry was held by the Ministry of Health as to the installation of a public water supply, to be taken from the main of the Lincoln water works, in the villages of Dunham, Marnham, Ragnall and Fledborough. It was recognised generally that such would be an advantage, but the cost was prohibitive at the present prices of labour and materials.

The two parishes of Tuxford and East Markham derive their supply from the Lincoln water works, and there are certain private occupiers who have made their own arrangements for this.

The western portion of the District is situated upon the red sandstone, which is superimposed on the Keuper marls. This is one of the best water supplies in the country ; the water is pure and not very hard, and useful for all purposes. Many of the wells are shallow, and to that extent are liable to pollution, unless well built near the surface, but on the whole, the water in them is good.

The Corporation of Lincoln have their water works in the parish of Elkesley, and draw their water from this source. The effect of their deep bore holes has been to lower the water in some of the shallow wells in the neighbourhood, which have had to be deepened. So good is the quality that several Authorities either take or have tried to obtain powers to take their water supply from this area. At present there is an abundant supply for present needs, but as this area is the only area of supply for the whole county and is only some 70 miles long by 12 wide, it is doubtful if it will stand much more depletion for outside sources. Especially must it be remembered that coal underlies the district, and when this is worked, the population will increase considerably and the water be required for home consumption.

The latest attempt to obtain the water is being made by the Corporation of Rotherham, who are seeking powers to drive a bore in the parish of Bawtry, just over the District boundary, but which will certainly draw water from the subsoil underlying this District. It is to be hoped that the County Council and the Rural District Authorities will strenuously oppose this filching of water, and will be successful in their opposition.

The RIVERS and STREAMS of the District consist of the River Trent, which forms part of the eastern boundary, and the River Idle and its tributaries, which run through the midst. There is no contamination of these streams caused in the District.

**Drainage and Sewerage.**—There is no system of general sewage disposal. The District being purely rural, it is not needed. In the different villages there are road sewers to take off surface waters and which connect with the dykes and ditches ; in some there are sewage tanks for sedimentation.

The bulk of the excrement disposal is by midden privies. These are being gradually renewed and constructed on modern lines with concrete floors and waterproof walls, and are easy of access for cleansing and are of small size. They answer the purpose in a sparsely populated district much better than pails. In Tuxford, there are a considerable number of pails, and the scavenging is done by contract. On the whole this is well done.

There are a few water closets in various parts of the district, in the larger houses, where there is a sufficient water supply ; these are connected with cesspools.

The District has been inspected during the year as to the existence of defects in premises and nuisances by me and by the Inspector of Nuisances. An account of these is given in the report of the Inspector of Nuisances, as follows :—

Inspections	...	...	109
Notices—Informal		...	22
Statutory		...	30
Effective		...	12

There are no offensive trades carried on with the exception of one blood and bone boiler. This establishment gave some trouble during the year owing to effluvium emanating therefrom and the disposition of the offal. After notices had been served and proceedings threatened the nuisance was abated.

The common lodging houses, two in number, are well kept.

There are no bye-laws or regulations in force in the District which deal with sanitation. The Public Health (Amendment) Act, 1890, has not been adopted.



**Schools.**—The sanitary condition and water supply of the schools (bearing in mind my remarks on water supply) is good. Only two have called for action in the matter of their sanitary condition, one of which has been remedied and the other has been dealt with on a temporary basis. It would be an improvement if there were better accommodation for washing in many of the schools. Your Medical Officer is not the School Medical Officer. The schools are visited when there is an outbreak of any infectious disease and enquiries made. Any matters bearing on the health of the children or suggestions as to closing are then made to the Chief School Medical Officer. It has not been necessary for the Council to close any of the schools during the year.

## **FOOD.**

**Milk.**—The District is not a dairy district, although there are a number of milksellers who export milk. This goes chiefly to the Borough of Retford and to Gainsborough and Doncaster. Some of the cowsheds, especially the smaller ones, are not so well kept as they should be, and I have made representations when on my visits of inspection to the tenants, and in most cases there has been improvement. It would be much better if tinned iron utensils were used generally for the collection of milk instead of the zinc buckets, which are so frequently met with, because they are so much more easily and efficiently kept clean.

Scarlet fever broke out in the house of one milkseller who sent his milk to London. Diphtheria broke out in the house of another who made butter, which was usually sent to Worksop. In both cases the sale was stopped during the continuation of the infection, and the Medical Officers of Health of the Districts to which the products were sent were communicated with.

*Milk (Mothers and Children) Order, 1919.*—No action has been taken by the Authority under this order, nor does there seem to be any necessity for it.



**Meat.**—No diseased meat has been found during the year, and the slaughter houses are in good condition generally. One was reported upon as being in bad condition and notice served on the owner to carry out repairs, and the matter is in hand.

There is no public abattoir nor are there any arrangements made for inspecting meat at the time of slaughter. It must be remembered in this connection that in a country district, where the cattle are known as it were personally, it is impossible to slaughter a diseased animal without the public knowing of it. The number of slaughter houses in 1914 was 12; no new ones have been opened.

**The Bakehouses** are generally in good condition; there are no underground bakehouses. One bakehouse was found to be dirty and badly ventilated; notice was served and defects remedied.

## **INFECTIOUS DISEASES.**

The District has been fortunate in having very little infectious disease during the year.

Of **Scarlet Fever** there have been only 14 cases. These were spread fairly evenly over the year as shown by the table annexed. Of these, two were traced as having contracted the infection in Retford, one from Misterton, one from Fillingham, and one from near Newark. In several others, there was the history of Sore Throats being found in children before the first case was notified as Scarlet Fever, suggesting that the early cases were mild Scarlet increasing in intensity on passage through successive patients.

**Diphtheria** was notified in 23 cases. One of these, on whom no bacteriological examination was made, stated that he had had similar symptoms three times before. He had Enlarged Tonsils which he said often became inflamed when he took cold.

A fatal case occurred at Finningley in April ; no origin for this could be found except that there was a leaking drain, which may have fouled the drinking water. From this case there were three others. Two cases occurred in East Markham ; it is possible that these two had been in contact with a carrier. An outbreak occurred in Stokeham and East Drayton in September. Six persons were involved ; all had been to a garden fete. The first case apparently received the infection from some visitors to the neighbourhood, from Sheffield, one of whom had had a sore throat. Owing to nursing difficulties and the need for maintaining efficient isolation, a trained nurse was provided for one family, and I am confident that owing to her services the outbreak was less than it would otherwise have been.

**Encephalitis Lethargica** occurred in two persons, one an infant, the other a boy of 13. The latter was a mild case and recovered, the former was aged one year and ten months and was fatal. These cases were in different parts of the District, and had nothing in common. No origin was detected in either.

Seven cases of **Pneumonia** were notified ; four of these were Influenzal, the remainder primary.

**Influenza** has not been prevalent, but there were three deaths from this cause.

Three cases of **Malaria** were notified ; all contracted the disease whilst on active service abroad.

No cases of **Dysentery** or **Trench Fever** occurred.

There have been a few cases of **Measles** in various parts of the District.

The School teachers notify the occurrence of any outbreak of Infectious Disease to me, and this is very useful, as it enables steps to be taken early to check any epidemic.

There have been no cases of **Anthrax** or **Rabies**.

The District Council contract for the examination of Swabs taken from the throats of suspected cases of Diphtheria, and Diphtheria Antitoxin is provided free of charge.

There is no Isolation Hospital in the District. An arrangement has been made whereby cases of Scarlet Fever can be taken in to the Isolation Hospital of the Borough of East Retford, if there be accommodation for them.

At the termination of any case of Infectious Disease, the rooms used by the patients are disinfected by the Inspector of Nuisances, and during the continuance of the case, disinfectants are supplied gratis.

**Tuberculosis.**—So far as I can ascertain, cases of Tuberculosis are notified by the attending practitioner as they occur. The administration of this subject is carried out by the County Council.

**Venereal Diseases.**—The administration of this branch of public health is carried on by the County Council. There is no clinic in the District ; cases have to be sent to Newark, and from the Northern part of the District they go to Doncaster.

**Maternity and Child Welfare.**—This again is managed by the County Authority, whose health visitors attend in the District.

No case of **Puerperal Fever** occurred during the year.

There was one case of **Ophthalmia Neonatorum**.

## **SANITARY ADMINISTRATION.**

There is one Inspector of Nuisances, who is also the District Surveyor. All the work of Sanitary Inspection lies on the routes he has to take in visiting his roads, and he is capable of undertaking both offices, and saving much overlapping and double journeys. A motor car is provided for his use. As your Medical Officer of Health, I provide my own means of locomotion. No clerical assistance is provided.



The following is a report of analysis of water taken during the year.

### Sample of Water taken at East Drayton.

APPEARANCE—Slightly opalescent, slight red brown deposit, no odour when shaken at ordinary temperature or at 110 F.

#### CHEMICAL EXAMINATION.

Total dissolved solids	...	...	92.4 grains per gallon.
<i>consisting approximately of—</i>			
Chalk	...	...	25.2 „
Salt	...	...	7.1 „
Gypsum	...	...	55.0 „
Free ammonia	...	...	0.017 „
Albuminoid ammonia	...	...	0.007 „
Chlorine as chloride	...	...	4.3 „
Nitrogen as nitrate	...	...	a trace.
Nitrogen as nitrite	...	...	present.

#### MICROSCOPICAL EXAMINATION.

The deposit consisted of iron hydroxide.

No objectionable organisms.

#### BACTERIOLOGICAL EXAMINATION.

Culture at 18° C. on nutrient gelatine for 72 hours—

Number of colonies per cc	...	...	...	600
---------------------------	-----	-----	-----	-----

Culture at 37° C. on neutral red bile agar for 72 hours—

Number of colonies	...	...	...	None
Bacillus coli communis	...	...	...	None

**Housing.**—There is still some shortage of housing accommodation, but apparently not so much as there was, which rather suggests that there has been some exodus from the District. At the same time there are houses which are not fit for habitation and which should be closed. That representations have not been made to that effect is due to the shortage of houses, and the difficulties, financial and other, which exist for obtaining new ones. To give a complete list of all houses which are occupied by more than one family or which are inconveniently full or overcrowded would involve a laborious survey of the District. The census which is about to be taken will put the District Council in possession of much valuable information on this head, and an accurate estimate of housing needs can then be made.

A Housing Scheme was elaborated, under which 100 new houses were to be built; of the total ten have been erected. Applications for two more have been made and are now under the consideration of the local Housing Commissioner. [Subsequently I learn that he has declined to approve the tenders on the ground that they are excessive].

The question of erecting new houses is also very largely dependent upon the locality of any increase of population, and events, especially as to the new collieries, have not yet sufficiently matured to enable anyone to say positively where new building should be undertaken.

**Factories and Workshops.**—The Premises which require to be inspected are chiefly smithies, carpenters' shops, dress-makers' and tailors' workrooms, and bakehouses. There is one iron works of some size, and some maltings. Notice to provide more efficient ventilation was served on one tailor, and a notice was served on the occupier of a bakehouse which was found to require cleansing. There are no outworkers or underground bakehouses. Section 22 of the Public Health (Amendment) Act is not in force in the District.

Appended are tables showing the deaths from all causes and the incidence from infectious diseases.

I am unable to close this report without placing on record my extreme regret at the death and my appreciation of the services of Mr. Thomas Henry, for 26 years the Rural District Surveyor and Inspector of Nuisances. The late Mr. Henry was a most capable and extremely conscientious official. His intimate knowledge of the District and its inhabitants and his genial manner with all will cause his loss to be long felt. Personally I always found his wide experience most useful, and in my early days as your Medical Officer, when I was new to Public Health administration, I derived much benefit from his advice and assistance.

I have the honour to be, Gentlemen,

Your obedient servant,

HANWAY R. BEALE.

*Retford, March 1921.*



TABLE A.

Month	Diph- theria	Ery- sipelas	Scarlet Fever	Acute Poli- omyeli- tis	Pneu- monia	Ophthal- mia Neona- torum	Enc'ph Leth'rg	Totals
January	...	...	...	...	...	...	1	1
February	1	3	3	...	3	...	...	10
March	1	...	1	...	3	...	...	5
April	7	...	2	...	...	...	...	9
May	...	1	...	...	...	1	...	2
June	6	1	...	...	1	...	...	8
July	...	1	3	...	...	...	...	4
August	...	...	...	...	...	...	1	1
September	6	...	1	...	...	...	...	7
October	1	2	1	...	...	...	...	4
November	1	...	3	1	...	...	...	5
December	...	...	...	...	...	...	...	...
Totals	23	8	14	1	7	1	2	56

*East Retford Rural District.*  
*Cases of Infectious Disease notified during the year 1920.*

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.								
	At all Ages.	At Ages—Years							
		Un- der 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 & up- wa'ds	
Small-pox ... ..	...	...	...	...	...	...	...	...	
Cholera (C) Plague (P) ...	...	...	...	...	...	...	...	...	
Diphtheria (incl. M. Croup)	23	...	4	8	3	6	1	1	
Encephalitis Lethargica...	2	...	1	1	...	...	...	...	
Ophthalmia Neonatorum	1	1	...	...	...	...	...	...	
Erysipelas ... ..	8	...	...	1	...	4	1	2	
Scarlet Fever ... ..	14	...	...	8	5	1	...	...	
Typhus Fever ... ..	...	...	...	...	...	...	...	...	
Enteric Fever ... ..	...	...	...	...	...	...	...	...	
Relapsing Fever (R) } Continued Fever (C) }	...	...	...	...	...	...	...	...	
Puerperal Fever ... ..	...	...	...	...	...	...	...	...	
Cerebro-spinal Meningitis	...	...	...	...	...	...	...	...	
Poliomyelitis ... ..	1	...	1	...	...	...	...	...	
Pulmonary Tuberculosis	...	...	...	...	...	...	...	...	
Other forms of Tuberculosis	...	...	...	...	...	...	...	...	
Pneumonia ... ..	7	...	...	...	1	3	2	1	
Lobar Pneumonia ... ..	...	...	...	...	...	...	...	...	
Malaria ... ..	...	...	...	...	...	...	...	...	
Dysentery ... ..	...	...	...	...	...	...	...	...	
Totals ... ..	56	1	6	18	9	14	4	4	

*East Retford Rural District.**Causes of Death during the year 1920.*

<i>CAUSES OF DEATH (Civilians Only).</i>					<i>Males.</i>	<i>Females.</i>
<i>ALL CAUSES.</i>					<i>97</i>	<i>94</i>
1	Enteric Fever	....	....	....	..	..
2	Small-pox	....	....	....	..	..
3	Measles	....	....	....	1	1
4	Scarlet Fever	....	....	....	1	..
5	Whooping Cough	....	....	....	..	1
6	Diphtheria and Croup	..	....	....	2	2
7	Influenza	....	....	....	2	1
8	Erysipelas	....	....	....	1	..
9	Pulmonary Tuberculosis	....	..	..	3	6
10	Tuberculous Meningitis	..	....	....	2	..
11	Other tuberculous diseases	....	....	....	2	3
12	Cancer and Malignant Disease	....	....	....	14	6
13	Rheumatic Fever	...	....	....	..	..
14	Meningitis	....	....	....	..	..
15	Organic Heart Disease..	....	....	....	9	14
16	Bronchitis	....	....	....	5	4
17	Pneumonia (all forms)	....	..	..	4	5
18	Other Respiratory Diseases	....	....	....	1	.
19	Diarrhoea, &c. (under 2 years)	..	..	..	..	1
20	Appendicitis & Typhlitis	....	....	....	1	..
21	Cirrhosis of Liver	....	....	....	2	..
21A	Alcoholism	..	....	....	..	..
22	Nephritis and Bright's Disease	..	....	....	1	1
23	Puerperal Fever	....	....	....	..	..
24	Parturition, apart from puerperal fever	..	....	....	..	..
25	Congenital Debility, &c.	....	....	....	5	4
26	Violence, apart from Suicide	....	....	....	3	1
27	Suicide	....	....	....	2	1
28	Other Defined Diseases	....	....	....	33	42
29	Causes ill-defined or unknown	....	....	....	3	1
Special Causes (included above)						
	Cerebro-spinal Fever	....	..	..	..	..
	Poliomyelitis	....	....	....	..	..
	Encephalitis Lethargica	....	..	..	..	1
Deaths of Infants under 1 year of age, total					12	9
	Illegitimate	....	....	..	2	..
<b>TOTAL BIRTHS</b>					<b>162</b>	<b>160</b>
	Legitimate	....	....	....	148	150
	Illegitimate	....	....	....	14	10
POPULATION (for births and deaths)					14,536	







